



## Complete Summary

---

### TITLE

Hypertension: percentage of members 18 to 85 years of age who had a diagnosis of hypertension and whose blood pressure (BP) was adequately controlled (BP less than 140/90 mm Hg) during the measurement year.

### SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 1, Narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 90 p.

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percentage of members 18 to 85 years of age who had a diagnosis of hypertension and whose blood pressure (BP) was adequately controlled (BP less than 140/90 mm Hg) during the measurement year.

### RATIONALE

One out of every 3 Americans currently has hypertension, or "high blood pressure," and over 90 percent of middle-aged and elderly Americans will be

affected by it at some point in their lives. The risk of developing hypertension increases greatly with age. Despite available effective treatment options, studies show that over half of Americans with hypertension go untreated or undertreated.

## **PRIMARY CLINICAL COMPONENT**

Hypertension

## **DENOMINATOR DESCRIPTION**

Members 18 through 85 years of age as of December 31 of the measurement year with a diagnosis of hypertension confirmed by chart review (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

## **NUMERATOR DESCRIPTION**

The number of members in the denominator whose most recent blood pressure (BP) is adequately controlled\* during the measurement year (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

\*For a member's BP to be controlled, *both* the systolic and diastolic BP *must* be less than 140/90 (adequate control).

## **Evidence Supporting the Measure**

### **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## **Evidence Supporting Need for the Measure**

### **NEED FOR THE MEASURE**

Overall poor quality for the performance measured  
Use of this measure to improve performance  
Variation in quality for the performance measured

### **EVIDENCE SUPPORTING NEED FOR THE MEASURE**

American Heart Association. Heart disease & stroke statistics: 2009 update. Dallas (TX): American Heart Association; 2009. 36 p.

National Committee for Quality Assurance (NCQA). The state of health care quality 2009. Washington (DC): National Committee for Quality Assurance (NCQA); 2009. 127 p.

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Accreditation  
Decision-making by businesses about health-plan purchasing  
Decision-making by consumers about health plan/provider choice  
External oversight/Medicaid  
External oversight/Medicare  
External oversight/State government program  
Internal quality improvement

## Application of Measure in its Current Use

### CARE SETTING

Managed Care Plans

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

### TARGET POPULATION AGE

Age 18 to 85 years

### TARGET POPULATION GENDER

Either male or female

### STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

## Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

See the "Rationale" field.

## **ASSOCIATION WITH VULNERABLE POPULATIONS**

See the "Rationale" field.

## **BURDEN OF ILLNESS**

- Nearly one-third of adults with high blood pressure are unaware of their condition, thus increasing the risk of associated complications and diseases.
- People with hypertension have twice the lifetime risk of stroke compared to those without hypertension.
- High blood pressure was listed as a primary or contributing cause in approximately 319,000 deaths in the U.S. in 2005.

## **EVIDENCE FOR BURDEN OF ILLNESS**

American Heart Association. Heart disease & stroke statistics: 2009 update. Dallas (TX): American Heart Association; 2009. 36 p.

American Heart Association. High blood pressure statistics - update. [internet]. Dallas (TX): American Heart Association; 2009 Mar 23[accessed 2009 May 01].

Seshadri S, Beiser A, Kelly-Hayes M, Kase CS, Au R, Kannel WB, Wolf PA. The lifetime risk of stroke: estimates from the Framingham Study. Stroke 2006 Feb;37(2):345-50. [PubMed](#)

## **UTILIZATION**

Unspecified

## **COSTS**

In 2009, the estimated direct and indirect costs associated with high blood pressure in the U.S. totaled \$73.4 billion.

## **EVIDENCE FOR COSTS**

American Heart Association. Heart disease & stroke statistics: 2009 update. Dallas (TX): American Heart Association; 2009. 36 p.

## **Institute of Medicine National Healthcare Quality Report Categories**

## **IOM CARE NEED**

Living with Illness

## **IOM DOMAIN**

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

Members 18 through 85 years of age as of December 31 of the measurement year with a diagnosis of hypertension confirmed by chart review who were continuously enrolled during the measurement year with no more than one gap in continuous enrollment of up to 45 days during the measurement year (commercial, Medicare) or with not more than a one-month gap in coverage (Medicaid)

### DENOMINATOR SAMPLING FRAME

Patients associated with provider

### DENOMINATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

Members 18 through 85 years of age as of December 31 of the measurement year with a diagnosis of hypertension\* confirmed by chart review

To confirm the diagnosis of hypertension, the organization must find notation of one of the following in the medical record on or before June 30 of the measurement year:

- Hypertension (HTN)
- High blood pressure (HBP)
- Elevated blood pressure (?BP)
- Borderline HTN
- Intermittent HTN
- History of HTN
- Hypertensive vascular disease (HVD)
- Hyperpiesia
- Hyperpiesis

The notation of hypertension may appear anytime on or before June 30 of the measurement year, including prior to the measurement year. It does not matter if hypertension was treated or is currently being treated. Refer to the original measure documentation for further details.

*\*Hypertensive.* A member is considered hypertensive if there is at least one outpatient encounter with an International Classification of Diseases, Ninth Revision (ICD-9) diagnosis code of 401 during the first six months of the measurement year. Use the codes listed in Table CBP-B in the original measure documentation to define outpatient visits.

#### Exclusions

- Exclude from the eligible population all members with evidence of end-stage renal disease (ESRD) (refer to Table CBP-C in the original measure documentation for codes to identify exclusions) on or prior to December 31 of the measurement year. Documentation in the medical record must include a dated note indicating evidence of ESRD. Documentation of dialysis or renal transplant also meets the criteria for evidence of ESRD.
- Exclude from the eligible population all members with a diagnosis of pregnancy (refer to Table CBP-C in the original measure documentation) during the measurement year.
- Exclude from the eligible population all members who had an admission to a nonacute inpatient setting any time during the measurement year. Refer to Table FUH-B in the original measure documentation for codes to identify nonacute care.

## **RELATIONSHIP OF DENOMINATOR TO NUMERATOR**

All cases in the denominator are equally eligible to appear in the numerator

## **DENOMINATOR (INDEX) EVENT**

Clinical Condition  
Encounter

## **DENOMINATOR TIME WINDOW**

Time window precedes index event

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

The number of members in the denominator whose blood pressure (BP) is adequately controlled\* during the measurement year

\*For a member's BP to be controlled, *both* the systolic and diastolic BP *must* be less than 140/90 (adequate control).

To determine if a member's BP is adequately controlled, the organization must identify the representative BP\*\*.

\*\**Representative BP*: The most recent BP reading during the measurement year (as long as it occurred after the diagnosis of hypertension was made). If multiple BP measurements occur on the same date or are notated in the chart on the same date, the lowest systolic and lowest diastolic BP reading should be used. If no BP is recorded during the measurement year, the member is assumed to be "not controlled."

### **Exclusions**

Do not include BP readings that meet the following criteria:

- BPs taken during an acute inpatient stay or an emergency department (ED) visit
- BPs taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole)

- BPs obtained the same day as a major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy)
- BP readings reported by or taken by the member

If the organization cannot find the medical record, the member remains in the measure denominator and is considered noncompliant for the numerator.

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

### **NUMERATOR TIME WINDOW**

Encounter or point in time

### **DATA SOURCE**

Administrative data  
Medical record

### **LEVEL OF DETERMINATION OF QUALITY**

Not Individual Case

### **OUTCOME TYPE**

Clinical Outcome

### **PRE-EXISTING INSTRUMENT USED**

Unspecified

## **Computation of the Measure**

### **SCORING**

Rate

### **INTERPRETATION OF SCORE**

Better quality is associated with a higher score

### **ALLOWANCE FOR PATIENT FACTORS**

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

## DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for commercial, Medicare, and Medicaid product lines.

## STANDARD OF COMPARISON

External comparison at a point in time  
External comparison of time trends  
Internal time comparison

## Evaluation of Measure Properties

## EXTENT OF MEASURE TESTING

Unspecified

## Identifying Information

## ORIGINAL TITLE

Controlling high blood pressure (CBP).

## MEASURE COLLECTION

[HEDIS® 2010: Health Plan Employer Data and Information Set](#)

## MEASURE SET NAME

[Effectiveness of Care](#)

## MEASURE SUBSET NAME

[Cardiovascular Conditions](#)

## DEVELOPER

National Committee for Quality Assurance

## FUNDING SOURCE(S)

Unspecified

## COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.



## **FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

## **ENDORSER**

National Quality Forum

## **ADAPTATION**

Measure was not adapted from another source.

## **RELEASE DATE**

2000 Jan

## **REVISION DATE**

2009 Jul

## **MEASURE STATUS**

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

## **SOURCE(S)**

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 1, Narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 90 p.

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

## **MEASURE AVAILABILITY**

The individual measure, "Controlling High Blood Pressure (CBP)," is published in "HEDIS® 2010. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org).

## **COMPANION DOCUMENTS**

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2009. Washington (DC): National Committee for Quality Assurance (NCQA); 2009. 127 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org).

## **NQMC STATUS**

This NQMC summary was completed by ECRI on July 18, 2003. The information was verified by the measure developer on August 29, 2003. This NQMC summary was updated by ECRI on June 16, 2006. The updated information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on February 19, 2008. The information was verified by the measure developer on April 24, 2008. This NQMC summary was updated by ECRI Institute on March 10, 2009. The information was verified by the measure developer on May 29, 2009. This NQMC summary was updated again by ECRI Institute on January 22, 2010.

## **COPYRIGHT STATEMENT**

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

For detailed specifications regarding the National Committee on Quality Assurance (NCQA) measures, refer to *HEDIS Volume 2: Technical Specifications*, available from the NCQA Web site at [www.ncqa.org](http://www.ncqa.org).

## **Disclaimer**

### **NQMC DISCLAIMER**

The National Quality Measures Clearinghouse™ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC

Inclusion Criteria which may be found at  
<http://www.qualitymeasures.ahrq.gov/about/inclusion.aspx>.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. The inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.

[Copyright/Permission Requests](#)

Date Modified: 5/24/2010

